

Purpose of Checklist: The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help King County identify impacts from a proposal (and to reduce or avoid impacts from the proposal, if it can be done), and to help the County decide whether an EIS is required.

A. BACKGROUND

1. Name of proposed project, if applicable:

The Reserve at Woodlands Initial Infiltration Facility Grading Permit and Development Agreement

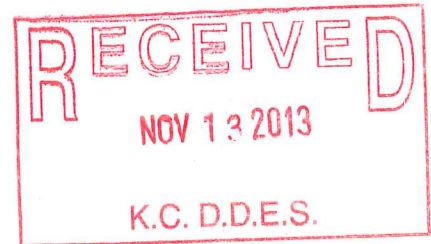
2. Name of proponent:

BD Village Partners, LP

3. Address and phone number of proponent and contact person:

Proponent: BD Village Partners, LP
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4. Date checklist prepared:

November 12, 2013

5. Agency requesting checklist:

King County Department of Permitting and Environmental Review

6. Proposed timing or schedule (including phasing, if applicable):

This SEPA Checklist covers two actions on a 394-acre site ("The Reserve at Woodlands") adjacent to the City of Black Diamond. The Reserve at Woodlands is subject to the terms of an agreement entitled "Open Space Agreement" between King County and BD Village Partners, LP dated December 17, 2009 (the "Open Space Agreement") and adopted by the County under Ordinance No. 16739.

The first is a project action for a grading permit to construct a test infiltration facility on The Reserve at Woodlands as the first phase of a regional stormwater facility (the "Grading Permit"). The test infiltration facility will accomplish dual purposes: (i) provide a location for King County to discharge floodwaters from Horseshoe Lake; and (ii) verify modeled infiltration rates of the area designated for infiltration associated with the regional stormwater facility. For consistency with the terms of the Open Space Agreement, the

proponent proposes that the Grading Permit be conditioned on the approval of a development agreement between King County and BD Village Partners, LP that would govern the entire development of The Reserve of Woodlands, a proposed draft copy of which is included with the Grading Permit application.

It therefore follows that the second action is a non-project action (as defined by WAC 197-11-774) for the aforementioned development agreement between King County and BD Village Partners, LP governing future development of The Reserve at Woodlands (the "Development Agreement"). The Development Agreement contemplates four related projects: (1) a regional stormwater facility; (2) a pipeline for pumping stormwater from Horseshoe Lake to the regional stormwater facility; (3) a rural residential clustered subdivision with up to 77 lots; and (4) segments of King County's Green-to-Cedar Rivers Regional Trail. The King County Council is expected to take action on the Development Agreement before the end of 2013. Development of the regional stormwater facility and its conveyance system, subdivision, and regional trail are expected to occur in phases over a 15-to-20 year period. The regional stormwater facility, conveyance pipeline from Horseshoe Lake to the regional stormwater facility, subdivision, and portions of the Green-to-Cedar Rivers Regional Trail contemplated in the Development Agreement are described in additional detail under Question 7 for purposes of environmental review of the Development Agreement only. This SEPA Checklist is not reviewing the impacts of the regional stormwater facility (including its conveyance system), the rural clustered subdivision, or the segments of regional trail proposed to be located within The Reserve at Woodlands. Those impacts will be addressed in subsequent SEPA review when applications for such projects are submitted to King County.

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, please explain.

Under the proposed Development Agreement, The Reserve at Woodlands will be developed in several phases.

Rural Clustered Subdivision. The rural clustered subdivision discussed in the Development Agreement will be constructed over a period of several years and recorded in two to three phases. As initially designed, the site included a "conventional" RA-5 subdivision, a 100-foot development buffer, and only the northern trail easement portion of the Green-to-Cedar River Regional Trail. Through the design process, however, including feedback from King County, and employment of the County's rural clustered subdivision provisions, The Reserve at Woodlands' site design has evolved into a rural clustered subdivision that: (i) consolidates its residential lots on the eastern side of 218th Ave SE thereby increasing the amount of permanent open space associated with the project by approximately 100 acres and preserving in its undeveloped condition the area surrounding the headwaters of Crisp Creek; (ii) expands the development buffer on the eastern boundary of the site from 100 feet to 300 feet in width; (iii) relocates the southern trail easement of the Green-to-Cedar Rivers Regional Trail on site in order to provide a connection for trail users between 218th Ave SE, the Black Diamond Natural Area, and the trail easement on the eastern boundary of The Reserve at Woodlands property; (iv) provides private roads to be maintained by the homeowners' association of the rural clustered subdivision thereby avoiding any County road maintenance costs; (v) eliminates any vehicle connection to 218th Ave SE except for an emergency vehicle access only entrance requested by King County; (vi) reduces the site's access to one entrance from adjacent City of Black Diamond thereby reducing trail crossings to one; and (vii) imposes several conditions that ensure The Reserve at Woodlands will be developed consistent with rural character.

Regional Stormwater Facility. The regional stormwater facility to be located on The Reserve at Woodlands under the terms of the Development Agreement will encompass

approximately 40 acres on the eastern portion of the site. At full build-out, the regional stormwater facility is expected to store, treat and infiltrate stormwater from the rural clustered subdivision, from portions of the City of Black Diamond, and from Horseshoe Lake. The latter is a rural enclave north of the project site that has experienced repeated flooding problems over a period of years.. See The Reserve at Woodlands Regional Storm Water Facility Basin Map attached to the Development Agreement. The eastern portion of the regional stormwater facility will incorporate the regional pedestrian and equestrian trail that is proposed by King County along the eastern 100' of the Reserve at Woodlands site. Approximately 15 – 20 acres of the regional stormwater facility's footprint will be for large storm event storage and will remain passive open space in most years. The design of the regional stormwater facility and adjacent rural clustered subdivision will include an ultimate overflow system for extreme flood events (beyond code design standards) to direct overflow water to 218th Ave SE where it will enter existing roadside ditches that will transport the water to the Green River Valley floor, thus avoiding nearby hillsides and steep slopes. The regional stormwater facility will also be constructed over a period of 15 to 20 years.

Per the terms of the Development Agreement, the regional stormwater facility will also be designed to provide a combination of open water and near shore wildlife habitat. Native plantings and natural grading will allow for the facility to provide foraging and nesting habitat for a wide variety of local wildlife. In addition, this natural habitat will provide a buffer between the urban properties within the City and rural King County.

The regional stormwater facility is expected to be constructed in five (5) phases. See phasing map attached to the Development Agreement. The first phase - the test infiltration facility for which proponent has submitted the Grading Permit - is the only element of the construction addressed by this SEPA Checklist and serves two purposes as described in Question 11: (i) provide a location for King County to discharge floodwaters from Horseshoe Lake; and (ii) verify modeled infiltration rates of the area designated for infiltration associated with the regional stormwater facility. This first phase will construct approximately 50% of the infiltration area for the ultimate regional stormwater facility.

The second phase of construction is anticipated to complete the infiltration area of the regional stormwater facility and construct approximately 50% of the wet pond, 50% of the secondary water quality polishing facility and approximately 25% of the live storage volume. This second phase is expected to be constructed in conjunction with the initial phase of development of The Reserve at Woodlands subdivision or construction of a portion of The Villages Master Planned Development (MPD) tributary to the regional stormwater facility. See map attached to the Development Agreement showing the areas tributary to the regional stormwater facility.

The third phase of the regional stormwater facility construction is anticipated to enlarge the wet pond and secondary water quality polishing facility to approximately 75% of the ultimate build-out of the regional stormwater facility while enlarging live storage to approximately 50% of ultimate facility volume. This third phase is expected to be constructed as development of The Villages MPD progresses and additional capacity is required.

The fourth phase of construction will occur as needed to serve development of The Villages MPD and is anticipated to include completion of the wet pond and secondary water quality polishing facility along with enlargement of live storage to approximately 75% of the ultimate regional stormwater facility live storage volume.

The fifth phase of facility construction will consist of construction of additional live storage volume to serve the remainder of The Villages MPD within the regional stormwater facility basin.

Horseshoe Lake Conveyance Pipe. As part of its grading and construction of The Villages MPD, the proponent will bury the Horseshoe Lake Conveyance Pipe (as defined below). Such installation will result in approximately 2 acres of disturbed area and be subject to further permit and environmental review. It is anticipated that the Horseshoe Lake Conveyance Pipe will be buried in sections coinciding with construction and grading of sections of the regional trail.

King County Regional Trail. In addition to the rural clustered subdivision and regional stormwater facility, certain portions of the Green-to-Cedar River Regional Trail will be located on The Reserve at Woodlands. These trail segments will host pedestrian, bicycle and equestrian users in a 36-foot wide trail prism. As part of King County's input in The Reserve at Woodlands site design, the County requested a revised regional trail alignment through the subdivision, which has been accommodated in a general east/west direction in the vicinity of the southern area of lots. See Site Plan attached to Development Agreement as Exhibit 2. The realignment was requested to solve a substantial grade problem within the existing 100-foot trail easement in the southerly portion of the site. King County's eventual construction of the conceptual regional trail location on The Reserve at Woodlands site will result in approximately 9 acres of disturbed area, approximately 2.2 acres of new impervious area, and may result in some wetland buffer impacts. Preliminary grading quantities for the trail through The Reserve at Woodlands are estimated at approximately 48,000 cubic yards of cut and 48,000 cubic yards of fill. These quantities will be refined with final engineering of the trail system through The Reserve at Woodlands.

8. Environmental information that has been prepared, or will be prepared, directly related to this proposal.

Regional Context:

The Villages Master Planned Development Draft EIS, September 1, 2009 (the "DEIS") and The Villages Master Planned Development Final EIS, December 2009 (the "FEIS") describe probable environmental impacts for The Villages MPD, which lies adjacent to the east boundary of The Reserve at Woodlands. The DEIS and FEIS provide a regional context for generalized environmental issues in the area. In addition, the FEIS concluded that no adverse impacts to Crisp Creek slopes or slopes along the Green River were anticipated as a result of infiltrated stormwater in The Villages MPD or The Reserve at Woodlands. A copy of AESI's Technical Report on Geology, Soils, and Groundwater dated September 2008 is included in the Grading Permit submittal.

While challenged, the adequacy of the FEIS has been upheld by both the Black Diamond Hearing Examiner and King County Superior Court. Nevertheless, it remains the subject of a pending appeal in two matters:

- (1) Toward Responsible Development v. City of Black Diamond, Washington State Court of Appeals, Division I, No. 69418-9-I
- (2) Toward Responsible Development v. City of Black Diamond, Washington State Court of Appeals, Division I, No. 69414-6-I

Specific to The Reserve at Woodlands:

A Final Geotechnical and Infiltration Facility Evaluation was prepared by Golder Associates dated August 5, 2013. This report generally reviewed site conditions for the proposed 77-lot rural clustered subdivision and a regional stormwater facility on The Reserve at

Woodlands site. It also specifically addresses the Initial Infiltration Facility that will accept flood waters from Horseshoe Lake on an annual basis.

A Reconnaissance Report for Wildlife Habitat Assessment was prepared by Wetland Resources dated August 19, 2013. This report anticipates a 77-lot rural clustered subdivision and the regional stormwater facility on The Reserve at Woodlands site. Multiple on-site observations and review of a variety of on-line resources were used in this analysis.

An Initial Infiltration Facility 1st Phase – Regional Stormwater Facility Project Description and Geotechnical Report was prepared by Triad Associates dated November 8, 2013. This report provides the testing approach, design approach, design calculations and other considerations associated with the Initial Infiltration Facility.

All of the above documents are hereby incorporated by reference into this Checklist. Copies of the site specific reports are included with the submittal of the Grading Permit and this SEPA Checklist. An electronic copy of the FEIS is also provided; however, copies of the DEIS or FEIS appendices can be made available upon request.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by this proposal.

The Grading Permit, this SEPA review, and the Development Agreement.

10. List any governmental approvals or permits that will be needed for your proposal, if known.

The following list includes approvals or permits for the projects contemplated by the Development Agreement as well as the Grading Permit; however, as noted above, only the Grading Permit and Development Agreement are covered by this SEPA Checklist:

- | | |
|---------------------------------------------------------------|-----------------------------------------------|
| • SEPA Determination(s) | King County |
| • Development Agreement | King County |
| • Clearing and Grading Permits..... | King County |
| • Engineering and Structural Permits | King County |
| • Drainage Review..... | King County |
| • Rural Clustered Preliminary Plat(s)..... | King County |
| • Utility Permits | King County |
| • Water Extension Approval | Covington Water District |
| • NPDES Permit | State Dept. of Ecology |
| • Forest Practice Permit | State Dept. of Natural Resources/ King County |
| • Final Plat Approval(s) | King County |
| • Building Permits | King County |
| • Experimental Design Adjustment..... | King County |
| • Road Variance | King County |
| • Interlocal Agreement for Regional Stormwater Facility | King County/Black Diamond |

11. Description of the proposal including the proposed uses and the size of the project and site.

The Reserve at Woodlands site includes approximately 394 acres in section 21 of King County west of the Black Diamond city limits. The site lies on both the east and west side

of 218th Ave SE. This checklist addresses the environmental impacts associated with two actions: the Grading Permit and Development Agreement.

Initial Infiltration Facility. The Grading Permit is for a test infiltration facility (the “Initial Infiltration Facility”) that is the first phase of the regional stormwater facility and located in the northeast corner of the site. The Initial Infiltration Facility will allow for periodic discharge and infiltration of pumped flood waters from Horseshoe Lake, which is located approximately ½ mile north of the site. Horseshoe Lake has historically had flooding issues and King County on several occasions has pumped down the Lake’s water levels to various receiving areas under emergency conditions to alleviate flooding of homes. If the testing of this location proves successful, this initial phase of the regional stormwater facility will provide a permanent solution for the flooding problems at Horseshoe Lake by providing a receiving body for future pumping of storm water by King County during flood conditions.

The grading for the Initial Infiltration Facility will create an approximate 0.66 acre pond sized and designed to receive and infiltrate flood waters from Horseshoe Lake on an annual basis. It is estimated that approximately 7,040 cubic yards of material will be displaced as a result of the construction of this Initial Infiltration Facility. Displaced material will remain on-site in the immediate area and will be appropriately stabilized as shown on the Initial Infiltration Facility’s grading permit. Total site disturbance, which includes the initial infiltration area and necessary stock-pile areas, total approximately 1.52 acres. The Initial Infiltration Facility will also serve as a test location for evaluating and verifying the infiltration capacity of the underlying soils and influences on the regional groundwater aquifer for the ultimate regional stormwater facility. The Initial Infiltration Facility will be accessed from existing on-site gravel roads and will have little or no impact on the site or surrounding properties.

The Grading Permit application for the Initial Infiltration Facility does not include the pump or piping necessary to convey floodwater from Horseshoe Lake into the Initial Infiltration Facility. Per the terms of the Development Agreement, if Horseshoe Lake needs to be pumped prior to proponent’s grading of the Initial Infiltration Facility, then King County will be installing approximately 4,000 linear feet of pipe extending from Horseshoe Lake to The Villages MPD as shown on an exhibit attached to the Development Agreement (the “Horseshoe Lake Conveyance Pipe”) subject to the permitting requirements set forth by the City of Black Diamond, as applicable. Such pipe installation will be overland and King County will be the permit applicant. The County’s pipe installation will also include a stable pad for a portable pump at Horseshoe Lake and a temporary energy dissipater at the receiving end. Any permanent mechanical equipment necessary for pumping of Horseshoe Lake will either be submerged, underground or housed in a structure to limit ambient noise. Once the Horseshoe Lake Conveyance Pipe is installed, King County will pump excess Horseshoe Lake water if and as necessary to prevent flooding of homes around Horseshoe Lake. If pumping is not required prior to the grading of the Infiltration Facility, then, as a separate action, proponent will submit for any necessary permits and approval for installation of the Horseshoe Lake Conveyance Pipe to the Initial Infiltration Facility. Such installation will be subject to its own SEPA review.

Development Agreement. The proposed Development Agreement would limit BD Village Partners, LP, to subdividing The Reserve at Woodlands site as a rural clustered subdivision of no more than 77 lots; allow for construction of a regional stormwater facility that would be able to accept stormwater from the rural clustered subdivision, Horseshoe Lake, and the City of Black Diamond; and dedicate an easement for portions of the Green-to-Cedar Rivers Regional Trail.

12. **Location of the proposal. Provide a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area,**

provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if available.

The Reserve at Woodlands is located within portions of Section 21, Township 21 North, Range 6 East, lying westerly of the city limits of Black Diamond, Washington. The project is situated on approximately 394 acres consisting of the following 18 King County Tax Parcels: 212106-9044, 212106-9045, 212106-9046, 212106-9047, 212106-9049, 212106-9050, 212106-9051, 212106-9052, 212106-9054, 212106-9055, 212106-9056, 212106-9057, 212106-9058, 212106-9059, 212106-9060, 212106-9061, 212106-9062 and 212106-9063. See the Reserve at Woodlands Conceptual Site Plan attached to the Development Agreement as Exhibit 2.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. **General description of the site (circle one): flat and rolling, hilly, steep slopes, mountainous.**

The Reserve at Woodlands site is generally flat to rolling hills. Steep slopes exist on the southern and western portions of the property, but are anticipated to remain in open space as a result of the rural clustered subdivision contemplated by the Development Agreement.

- b. **What is the steepest slope on the site (approximate percent slope)?**

Portions of The Reserve at Woodlands site are in excess of 45% slope primarily located on the southern and westerly portions of the property, which are proposed to remain in open space as a result of the proposed rural clustered subdivision contemplated by the Development Agreement.

- c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

According to the Final Geotechnical and Infiltration Facility Evaluation prepared by Golder Associates (included with the Grading Permit application), the soil types on The Reserve at Woodlands site are as follows (as described from youngest to oldest):

- Wetland Deposits consisting of organic material, silt and clay are present in the wetland areas depicted on the site plan, Figure 1. No direct sampling of these materials was performed.
- Landslide Deposits (Qls), also referred to as mass wasting deposits (MW) are highly variable and range from wet, loose/soft silt to cobble-sized material, to large semi-intact landslide blocks. Landslide deposits are mapped extensively by Mullineaux (1965), and observed by Golder Associates, along the Green River Valley slopes and found locally in the Crisp Creek drainage.
- Vashon Recessional Outwash Deposits (Qvr) are present in the low channel-like area between the two upland areas on the Woodlands site. The recessional outwash was deposited in a meltwater channel that eroded underlying materials including till and older glacial units. In some areas, due to past channel erosion, the Qvr may directly overlie older pre-Olympia glacial deposits creating "windows" that connect the shallow Qvr aquifer with the older and deeper pre-Olympia aquifer (see below). In the proposed stormwater and infiltration pond area, the Qvr is a loose, fine to coarse

sand and fine to coarse gravel with little to trace silt. The Qvr deposits are about 45 to 65 feet thick in the Woodlands regional stormwater facility area.

- Vashon Ice-Contact Deposits (Qvic) are present above the Green River bluffs to the east and west of the Qvr deposits. The ice contact deposits consist of medium dense, medium to coarse sand with varying amounts of gravel, and little silt. The Qvic deposits are about 5 to over 20 feet thick where present.
- Vashon Till (Qvt) is present capping the upland areas to the east and west of the recessional outwash channel deposits on the Woodlands site. The till is a compact to dense, non-stratified, silty sand and gravel. The Qvt deposits are up to 50+ feet thick where present.
- Pre-Olympia Coarse Glacial Outwash Deposits (Qpog_{1c}) are present in the subsurface below the Vashon age deposits. In the area of the proposed infiltration pond, the Qpog_{1c} is described as medium to coarse sand with gravel, with trace silt. The coarse-grained sections of the Qpog_{1c} were deposited by meltwater streams and may be channelized with lateral and vertical changes in grain size. A 5-foot thick section of silty sand, possibly representing a till, was intersected in wells MW-11, MW-12, and MW-13 about 50 feet below ground. The Qpog_{1c} deposits are about 80 feet thick in the Woodlands area.
- Pre-Olympia Coarse Non-Glacial Deposits (Qpon_{1c}) are present in the subsurface below the Qpog_{1c}. On the Woodlands site, the Qpon_{1c} is described as fine to coarse sand with trace gravel, and silt. The Qpon_{1c} deposits are about 25 to 40 feet thick in the Woodlands area.
- Hammer Bluff Formation (Th) is a Tertiary-age bedrock and is broken into two members. The unit descriptions below are provided by Mullineaux (1965).
 - The Upper Member is composed mostly of clayey fluvial sand and gravel and includes thin silt and clay lenses and wood fragments. The sand and gravel are composed of volcanic material and are partly weathered to clay. The maximum known thickness of the Upper Member is about 75 feet. This unit is relatively clay-rich, has low permeability, and is prone to landsliding. Based on plant fossils found at the base of the unit the Upper Member is Late Miocene in age (about 5 to 11 million years old).
 - The Lower Member is composed of mostly lacustrine and fluvial quartzose sand kaolinitic clay probably derived from the arkosic rocks of the Puget Group (described below) and includes volcanic ash beds and woody lignite. Maximum known thickness is about 28 feet.
- Puget Group (Tp) (undifferentiated) Arkosic sandstone, mudstone and shale localized coal beds, flint clay, with traces of oil and gas deposits. Irregularly cemented by calcium carbonate, and locally concretionary. Locally weathered to clayey, quartzose sand. Cut by numerous faults of small displacement. The maximum thickness is estimated to be about 5,500 feet.

Additional information can be found in the Final Geotechnical and Infiltration Facility Evaluation prepared by Golder Associates dated August 5, 2013 (included with the Grading Permit application).

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Yes - Steep slopes that border the south and west sides of The Reserve at Woodlands site contain active and dormant slope failures. Active and dormant shallow landslides

were identified in two ravines that are tributaries to the Green River. Three dormant landslides and three active landslides were identified in the Crisp Creek drainage ravine. The active shallow landslides were located for the most part at locations where groundwater seeps were located on very steep slopes (40-45 degrees). More detailed information regarding unstable soils can be found in the Final Geotechnical and Infiltration Facility Evaluation prepared by Golder Associates dated August 5, 2013 included with the Grading Permit application.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

The grading associated with the Initial Infiltration Facility location has been estimated as a disturbed area of 1.52 acres and an excavation of 7,040 cubic yards of material. The material is planned to be stockpiled on-site in the vicinity of the excavation. See the enclosed Grading Permit application for specific details. The Initial Infiltration Facility has dual purposes: (i) to provide a receiving site for Horseshoe Lake floodwaters during annual storm events; and (ii) to test the modeled infiltration rates for the regional stormwater facility.

Grading is necessary to prepare the Reserve at Woodlands site for development and to ensure that the site can be served by water and storm drainage utilities. It is estimated that there will be approximately 67,000 cubic yards of strippings, 622,500 cubic yards of cut and 336,900 cubic yards of fill over the entire site, including the regional stormwater facility. The ultimate fill quantities will be determined during final engineering. It is anticipated that any fill required to achieve the design grade will be placed from on-site cut. No clearing or grading activity will start until necessary permits and approvals for such activity are obtained.

For the segments of the Green-to-Cedar River Regional Trail located on The Reserve at Woodlands, it is estimated that approximately 48,000 cubic yards of cut and fill will be required for trail grading. This material is expected to come from The Reserve at Woodlands site.

When the Horseshoe Lake Conveyance Pipe is ultimately buried between Horseshoe Lake and the regional stormwater facility per the terms of the proposed Development Agreement, it is estimated that approximately 43,000 cubic yards of fill and 5,000 cubic yards of cut will be required for construction of this section of the regional trail system. Material for this construction is proposed to come from The Villages MPD site.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Limited erosion could occur as a result of the construction of the Initial Infiltration Facility, regional stormwater facility, trail segments, the Horseshoe Lake Conveyance Pipe and the rural clustered subdivision on The Reserve at Woodlands site; however, temporary erosion and sedimentation control (TESC) measures will be utilized during the construction phase to minimize potential erosion impacts. Temporary erosion and sedimentation control plans must be submitted to and approved by King County prior to any clearing or grading activity. Use-related erosion impacts are unlikely since the rural clustered subdivision will be stabilized from an erosion control standpoint, and all stormwater will be directed to stormwater facilities.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No additional impervious surfaces will be created as a result of the Grading Permit associated with the Initial Infiltration Facility. Subsequent permit applications for rural clustered subdivision and regional trail segments will evaluate impervious surface estimates at the time of said applications; however, based on proposed land uses and stormwater balance assumptions, it is anticipated that approximately 6.9% of the rural clustered subdivision will be covered by impervious surfaces at completion.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The site for the Initial Infiltration Facility, regional stormwater facility, trail segments, the Horseshoe Lake Conveyance Pipe, and the rural clustered subdivision will be stabilized consistent with approved temporary erosion and sedimentation control (TESC) plans meeting the 2005 DOE Stormwater Management Manual for Western Washington and King County requirements. The TESC plans must be submitted and reviewed/approved as part of the independent final engineering and grading plan sets for the Initial Infiltration Facility and rural clustered subdivision. The TESC plan will include the use of best management practices (BMPs), which could include a combination of the following:

Stabilization BMPs may include:

- Seeding disturbed ground
- Mulching the ground with straw or wood chips
- Silt fencing around stock pile areas
- Preserving natural vegetation

Structural BMPs may include:

- Installing silt fencing around disturbed areas
- Channeling runoff through temporary pipes and drainage swales to minimize runoff concentration from exposed areas
- Straw bale barriers
- Inspection of facilities at regular intervals

In addition to the approved TESC plans, the contractor will be monitored by the Washington State Department of Ecology under the National Pollutant Discharge Elimination System Permit (NPDES) Stormwater Construction General Permit.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

See GHG Emissions Worksheet attached hereto.

During construction on The Reserve at Woodlands site, heavy equipment operation and vehicles will generate exhaust emissions. Additionally, dust particulates generated primarily by construction equipment and construction activities will be produced during the construction phase of this project. However, the Grading Permit associated with the Initial Infiltration Facility is limited to approximately 1.52 acres of disturbed area with construction lasting less than one month.

Long-term air impacts would be those typically associated with rural clustered residential both during construction and occupancy. Sources of long-term emissions and odor would include vehicle emissions from increased vehicle use generated by the

new residents. Additional SEPA analysis will be conducted during the rural clustered subdivision process as well as expansion of the regional stormwater facility and construction of the segments of the regional trail located on site.

b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.

There are no known off-site sources of emissions or odors that are likely to impact The Reserve at Woodlands site.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

To minimize the potential adverse impacts from emissions resulting from construction activities associated with The Reserve at Woodlands, Best Management Practices (BMPs) will be implemented to ensure that minimal amounts of dust and exhaust fumes leave the preliminary plat site. BMP measures may include street cleaning/sweeping, wheel washing, and watering of the site as necessary to help control dust and other particulates; and minimizing vehicle and equipment idling to reduce exhaust emissions at the site.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. There are a number of wetlands located on The Reserve at Woodlands site. Their location and appropriate buffers have been indicated on the Reserve at Woodlands Conceptual Site Plan attached to the Development Agreement as Exhibit 2. Crisp Creek also flows through a ravine located west of 218th Avenue SE and ultimately discharges to the Green River.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The grading for the Initial Infiltration Facility will not require work within 200 feet of a wetland. The future rural clustered subdivision, King County regional trail segments, and Horseshoe Lake Conveyance Pipe will require construction within 200 feet of a wetland as shown on the Reserve at Woodlands Conceptual Site Plan attached to the Development Agreement as Exhibit 2. Specifically, the Horseshoe Lake Conveyance Pipe may cross a limited portion of a small wetland in the northeast corner of the subject site. The King County regional trail will also cross the small wetland in the northeast corner of the subject site and may cross through portions of the wetland buffer located in the southeast portion of the property.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands, and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge material will be placed in or removed from wetlands. However, approximately 1,000 square feet (5' x 200') of wetland could be temporarily disturbed with the installation of the Horseshoe Lake Conveyance Pipe. It is anticipated that the Horseshoe Lake Conveyance Pipe would initially be laid across the wetland with permanent installation occurring in the future. The King County regional trail could also impact up to 8,000 square feet of the wetland depending on construction techniques. A boardwalk or narrower trail segment in the wetland area would help mitigate potential impacts to the wetland.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

No. The Covington Water District will provide domestic water service to the future rural clustered subdivision.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Stormwater runoff will be handled in accordance with the 2005 DOE Stormwater Manual for Western Washington (or current manual at the time of a complete application) prior to discharge or infiltration from the approved stormwater system. Future application for a rural clustered subdivision will include surface drainage from roadways, which will be directed to appropriate water quality facilities and be discharged either to surface waters or infiltration in accordance with the DOE Stormwater Manual for Western Washington.

b. Ground:

1) Will groundwater be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

King County will pump flood water from Horseshoe Lake and it is proposed that this flood water will be discharged to groundwater via the regional stormwater facility. Refer to the Initial Infiltration Facility Project Description and Geotechnical Report prepared by Triad Associates dated August 19, 2013 (included within the Grading Permit application) for a description and approximate quantities. It is anticipated that a stormwater adjustment will be required to be obtained from King County for the diversion of Horseshoe Lake floodwater to the Initial Infiltration Facility and ultimately the regional stormwater facility. It is expected that this adjustment will be an Experimental Design Adjustment per the King County Surface Water Design Manual. Available information on past Horseshoe Lake flood water pumping events show that up to approximately 140 acre-feet of water has been pumped during a flooding event.

Stormwater runoff from a portion of the future rural clustered subdivision and from a portion of The Villages MPD is proposed to be routed to the regional stormwater facility for water quality treatment prior to infiltration. Infiltrated stormwater ultimately will combine with groundwater under the infiltration facility. The seasonal high groundwater in this area is estimated to be approximately 46 feet below the proposed

bottom of the regional stormwater facility as discussed in the Final Geotechnical and Infiltration Facility Evaluation report prepared by Golder Associates dated August 19, 2013 (included with the Grading Permit application). This report discusses soils, groundwater and groundwater flow directions in the vicinity of the proposed regional stormwater facility. This report discusses that at full build-out of the tributary basin to the ultimate regional stormwater facility the mitigated developed recharge to the pre-Olympia aquifer is estimated to increase approximately 650 acre-feet/year. This calculated increase in recharge to the pre-Olympia aquifer is further estimated to amount to approximately 2.2% of the total volume of the pre-Olympia aquifer tributary to the Crisp Creek springs and springs along the Green River slope between Crisp Creek and the southwest corner of the main property. While this calculated increase to the pre-Olympia aquifer is not considered to be a probable significant increase the Initial Infiltration Facility is designed to provide information to evaluate potential changes in the ground water flow system.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals ..; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

No septic waste materials are proposed to be discharged in the groundwater system as part of the grading permit for the Initial Infiltration Facility.

In the future, the rural clustered subdivision will include application for septic systems, which would discharge to groundwater. The future rural clustered subdivision is anticipated to use on-site septic systems for sewage disposal. Septic systems for the future rural clustered subdivision will use individual or community septic systems or a combination of individual and community systems. All septic systems for the proposed rural clustered subdivision will be designed in accordance with DOH requirements. Site specific evaluation for each proposed septic system will be conducted for septic system design. The future rural clustered subdivision and related septic system(s) will be reviewed under a separate application and associated SEPA review.

c. Water Run-off (including stormwater):

- 1) Describe the source of run-off (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

All runoff associated with the Initial Infiltration Facility and ultimate regional stormwater facility will infiltrate either in the stormwater facility area itself or the surrounding porous soils.

A separate storm drainage analysis will be prepared for the rural clustered subdivision evaluated under a separate SEPA review, which would describe a stormwater management plan for the subdivision. Stormwater runoff from a portion of the future rural clustered subdivision is proposed to be routed to the regional stormwater facility for water quality treatment prior to infiltration. Infiltrated stormwater ultimately will combine with groundwater under the infiltration facility. The seasonal high groundwater in this area is estimated to be approximately 46 feet below the proposed bottom of the regional stormwater facility as discussed in the Final Geotechnical and Infiltration Facility Evaluation report prepared by Golder

Associates dated August 5, 2013 (included within the Grading Permit application). This report discusses soils, groundwater and groundwater flow directions in the vicinity of the proposed regional stormwater facility.

Excess stormwater from Horseshoe Lake is proposed to be discharged by King County to groundwater via the regional stormwater facility. Refer to the Initial Infiltration Facility Project Description and Geotechnical Report prepared by Triad Associates (included within the Grading Permit application) for a description and approximate quantities.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Waste materials will not enter the ground or surface waters as a result of the grading permit application associated with the Initial Infiltration Facility. No discharge of waste material is contemplated. The floodwater discharge from Horseshoe Lake is primarily groundwater and any pollutants that reach Horseshoe Lake are pre-settled in the lake, which acts as a settling pond.

In the future, on-site septic system(s) will be associated with the proposed rural clustered subdivision and will be designed in accordance with DOH requirements and evaluated at that time. Given the depth to seasonal high groundwater, risks to groundwater are further reduced as noted in the Final Geotechnical and Infiltration Facility Evaluation report prepared by Golder Associates dated August 5, 2013 (included with the Grading Permit application).

d. Proposed measures to reduce or control surface, ground, and run-off water impacts, if any:

The Initial Infiltration Facility and ultimate regional stormwater facility seek to provide a permanent solution to an annual threat of flooding of several homes around Horseshoe Lake. The proponent is providing a facility to allow King County to establish a permanent solution to the annual flooding problem. See project description in Section A-11 above. The Initial Infiltration Facility is proposed to be constructed to evaluate infiltration rates and affects to ground water elevation by utilizing Horseshoe Lake flood water for a relatively large scale test. In order to assess the long term performance and impacts as well as the feasibility of expanding the infiltration cell in this location, additional information will be collected prior to and during Horseshoe Lake floodwater infiltration events. The following is a list of monitoring and testing tasks that will be performed. This list is subject to revision based on the results as they are obtained.

Field testing of the infiltration receptor soils in the initial infiltration facility will be completed using the infiltration test methods described in the King County Stormwater Manual. The results of the infiltration tests will be used to optimize (if necessary) the design of the Initial Infiltration Facility that will receive pumped Horseshoe Lake flood water.

Once the Initial Infiltration Facility is constructed, it will be monitored when put into use to infiltrate pumped water from Horseshoe Lake. The monitoring will include infiltration rate data and groundwater elevation measurements. The test procedure to monitor infiltration rates would closely follow the King County method for Pilot Infiltration Test (PIT). Seven existing groundwater monitoring wells in the vicinity of the infiltration facility would be instrumented to record groundwater elevations (MW-10 through MW-13, MW-28, MW-29 and MW-30). The data collected will be used to

confirm the long term design infiltration rates for the receptor soils and measure groundwater effects such as mounding below the infiltration cell and elevation changes down gradient from the facility. Additional PIT's may be completed in the location of the planned regional facility expansion using Horseshoe Lake water, if available.

A hydrogeologic analysis will be completed using the data collected during infiltration events to determine if there are any measurable impacts on the groundwater system (Qpog1c aquifer) that ultimately discharges to Crisp Creek and the Green River. If measurable changes or significant mounding is observed as a result of the infiltration, consideration will be given to installing additional monitoring wells down gradient of the facility to evaluate the effects of mounding closer to Crisp Creek and the slopes along the Green River.

4. Plants

a. Check or circle types of vegetation found on the site:

- ☒ **Deciduous trees:** Alder, maple, aspen, other
☒ **Evergreen trees:** Fir, cedar, pine, other
☒ **Shrubs**
☐ **Grass**
☐ **Pasture**
☐ **Crop or grain**
☒ **Wet Soil Plants:** Cattail, buttercup, bulrush, skunk cabbage, other
(While wetlands exist on the 394 acre site constituting The Reserve at Woodlands, none are within 200 feet of the Initial Infiltration Facility specifically contemplated by the first grading permit)
☐ **Water Plants:** Water Lily, eelgrass, milfoil, other
☐ **Other types of vegetation**

b. What kind and amount of vegetation will be removed or altered?

An area approximately 1.52 acres in size will be cleared for the construction of the Initial Infiltration Facility and associated stockpile area. An access roadway to this facility already exists with little to no additional clearing necessary. In addition, an initial overland connection from Horseshoe Lake to the Initial Infiltration Facility can be made with very nominal clearing necessary.

For the future rural clustered subdivision, an area of approximately 85 acres in size will be cleared for the construction of roads and stormwater facilities, including the regional stormwater facility. Because of the size of the lots, the individual lots will predominantly remain vegetated until home construction. It is estimated that on average, 50% to 60% of the lot will be cleared for the construction of homes, driveways, drain fields and yards for an additional 42 to 50 acres.

For the segment of the Green-to-Cedar River Regional Trail located on The Reserve at Woodlands site it is estimated that approximately 9 acres of existing vegetation will be disturbed or altered with trail construction.

For initial installation of the overland Horseshoe Lake Conveyance Pipe, minimal disturbance to approximately 1.2 acres of existing vegetation is expected. Disturbance from installation of the initial overland pipe is expected to consist primarily of disturbance from an excavator dragging the pipe through the woods. Burying of the Horseshoe Lake Conveyance Pipe is expected to occur in phases with construction of the King County

regional trail along this section. Construction of the regional trail along the Horseshoe Lake Conveyance Pipe on The Villages MPD project site is estimated to disturb approximately 5 acres of existing vegetation.

c. List threatened or endangered species known to be on or near the site.

There are no known threatened or endangered species on or near The Reserve at Woodlands site. Please see the Reconnaissance Report for Wildlife Habitat Assessment prepared by Wetland Resources dated August 19, 2013 (attached hereto) for more information.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Over 220 acres of the 394 total acres will remain in its existing vegetated state. This includes areas associated with Temporary Conservation Easements, Natural Open Space Areas, and Sensitive Areas.

Those areas that are initially disturbed (landscape tracts, stormwater facilities and rights of way) will be landscaped with native plants according to applicable codes and standards. The open water portion of the Regional Stormwater Facility will resemble a natural feature with plantings to discourage human intrusion. In addition, the landscaping in the tract for the Regional Stormwater Facility will comply with the Open Woodland standards of the 2009 Surface Water Design Manual's Guidelines for Naturalistic Plantings. Future disturbed areas, such as for homes, will be landscaped according to applicable codes and standards and will generally include lawn areas, shrubs and ornamental trees.

5. Animals

a. Check or circle any birds and animals which have been observed on or near the site, or are known to be on or near the site:

☒ **Birds:** hawk, heron, eagle, songbirds, other: Woodpecker
☒ **Mammals:** deer, bear, elk, beaver, other: Douglas squirrel
☒ **Fish:** bass, salmon, trout, herring, shellfish, other:

Please see the Reconnaissance Report for Wildlife Habitat Assessment prepared by Wetland Resources dated August 19, 2013 (attached hereto) for more information.

b. List any threatened or endangered species known to be on or near the site.

No threatened or endangered species are known to be on or near the Reserve at Woodlands site. Please refer to the Reconnaissance Report for Wildlife Habitat Assessment prepared by Wetland Resources dated August 19, 2013 (attached hereto) for more information.

c. Is the site part of a migration route? If so, explain.

None known.

d. Proposed measures to preserve or enhance wildlife, if any:

Over 220 acres of the 394 total acres will remain in its existing vegetated state. This includes areas associated with Temporary Conservation Easements, Natural Open Space Areas, and Sensitive Areas. The configuration of the open space into large tracts of contiguous open space and Open Space Corridors provides the opportunity for wildlife movement with minimal impact/interference.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

It is assumed that either an electric or petro pump would be used to pump Horseshoe Lake flood water to the receiving Initial Infiltration Facility. Electric, solar, and/or natural gas may be used to meet the primary energy needs of the new homes in the rural clustered subdivision.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

The rural clustered subdivision will be constructed to meet or exceed applicable county, state, and federal building codes to ensure compliance with energy conservation standards.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste, that could occur as a result of this proposal? If so, describe.**

It is unlikely, under normal working conditions, that environmental health hazards will be encountered as a result of The Reserve at Woodlands project. All project-related construction will meet all current county, state and federal regulations for environmental hazards.

- 1) Describe special emergency services that might be required.**

None anticipated.

- 2) Proposed measures to reduce or control environmental health hazards, if any:**

State regulations regarding safety and the handling of hazardous materials will be enforced during the construction process for The Reserve at Woodlands project. Equipment refueling areas will be located in areas where a spill could be quickly contained, and where the risk of the hazardous material entering surface water is minimized.

- b. Noise**

1) What types of noise exist in the area, which may affect your project (for example: traffic, equipment operation, other)?

None. In the future, there may be construction-related noise associated with construction of The Villages MPD immediately adjacent to The Reserve at Woodlands site.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short-term noise will result from the use of construction equipment during site construction for the Initial Infiltration Facility; however, no occupied land uses are currently within thousands of feet of the proposed construction area.

Long term, there could be background noise from a pump in Horseshoe Lake, depending on location, type and containment of the uptake facility constructed by King County.

During site development of the rural clustered subdivision and construction of homes, short-term noise will result from the use of construction equipment. Long term noise impacts may result from additional traffic and similar noises generated by the future rural clustered subdivision's residents.

Until a permanent pump facility is constructed by King County, a portable diesel powered pump would be used during Horseshoe Lake flooding events. The diesel pump initially sized is available in a "Critically Silenced" unit and operates at sound levels of approximately 69 dBA measured at 30 feet.

3) Proposed measures to reduce or control noise impacts, if any:

Contractors working on The Reserve at Woodlands site will use industry standard best practices to mitigate the adverse effects of construction noise by using the following methods whenever feasible:

- (1) Employ construction noise BMPs such as minimizing construction noise with properly sized and maintained mufflers, engine intake silencers, engine enclosures, and turning off equipment when not in use.
- (2) Stationary construction equipment will be located distant from sensitive receiving properties whenever possible. Where this is infeasible, or where noise impacts would still be likely to occur, portable noise barriers will be placed around the equipment (pumps, compressors, welding machines, etc.) with the opening directed away from the sensitive receiving property.
- (3) Ensure that all equipment required to use backup alarms utilizes ambient-sensing alarms that broadcast a warning sound loud enough to be heard over background noise, but without having to use a preset, maximum volume. Alternatively, use broadband backup alarms instead of typical pure tone alarms.
- (4) Operators will lift, rather than drag materials wherever feasible.
- (5) Substitute hydraulic or electric models for impact tools such as jackhammers, rock drills and pavement breakers, wherever feasible.

(6) Electric pumps shall be specified whenever pumps are required.

Per the terms of the proposed Development Agreement, any permanent mechanical equipment necessary for the pumping of Horseshoe Lake shall either be submerged, underground, or housed by the county in a structure to limit ambient noise.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Vacant forest land.

b. Has the site been used for agriculture? If so, describe.

Tree farm.

c. Describe any structures on the site.

There are no structures on the site.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

The site is zoned RA 5 and RA 10.

f. What is the current comprehensive plan designation of the site?

Rural Area.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes. There are six wetlands on the Reserve at Woodlands site. Specifically, there is a portion of a Category II wetland with a 100' buffer on the site, two Category III wetlands with 80' buffers, and three Category III wetlands with 50' buffers.

The area of the Initial Infiltration Facility and ultimate regional stormwater facility is flat to gently rolling and does not contain any slopes that would be considered erosion hazards. However, the steep slopes bordering the south side of The Reserve at Woodlands site and the ravines of the Crisp Creek drainage on the west contain landslide hazards. Refer to the Final Geotechnical and Infiltration Facility Evaluation report prepared by Golder Associates dated August 5, 2013 (included with the Grading Permit application) and Figure 1 for more information about the "environmentally sensitive" areas on The Reserve at Woodlands site.

i. Approximately how many people would reside or work in the completed project?

The Initial Infiltration Facility proposed for The Reserve at Woodlands will not create an increase in population. A future rural clustered subdivision on the site would include 77 lots for the creation of approximately 77 homes. The population and job analysis associated with such uses will be performed under further SEPA review associated with the rural clustered subdivision application; however, given that the average single-family household has 2.7 people, it is estimated that approximately 208 people will reside in The Reserve at Woodlands rural clustered subdivision.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

King County Code (KCC) 21A.08.060 specifically allows utility facilities in the RA zone. "Utility facility" is defined at KCC 21A.06.1350 as including "regional surface water flow control and water quality facilities." The proposed Initial Infiltration Facility and ultimate Regional Stormwater Facility proposed for The Reserve at Woodlands are "regional" because they will provide a receiving body for Horseshoe Lake floodwater as well as an associated conveyance system for pumping such floodwater and serve the future rural clustered subdivision on the site as well as portions of the adjacent Villages MPD in the City of Black Diamond. Moreover, the proponent anticipates in the future that the Regional Stormwater Facility will be owned and maintained by the City of Black Diamond under an interlocal agreement with King County as specifically contemplated in the City's approval of The Villages Master Planned Development. See The Villages MPD Permit Approval at Exhibit C, Conditions of Approval Nos. 63 and 78 (Black Diamond Ord. No. 10-946).

The rural clustered subdivision contemplated by the terms of the Development Agreement for The Reserve at Woodlands, is shown on the conceptual site plan attached to the Development Agreement as Exhibit 2 and is consistent with KCC 21A.14.040. Developing the site as a rural clustered subdivision will result in the creation of substantially more open space in Section 21 than a conventional subdivision and make more efficient use of the land by consolidating development to the east of 218th Ave SE. Moreover, as proposed, the terms of the Development Agreement attached hereto also ensure that The Reserve at Woodlands is developed consistent with rural character by requiring: (i) a covenant restricting connection to any urban sewer system unless done consistent with KCC Ch. 13.24; (ii) a covenant requiring the lots to remain in the rural area of King County and not be re-designated as urban in the County's Comprehensive Plan or annexed into a neighboring jurisdiction; (iii) a condition of plat approval requiring marketing materials for The Reserve at Woodlands to state that the project is in the rural area of King County; and (iv) a condition of plat approval requiring the proponent to place signs at the entrance of the project stating that one is now entering Rural King County.

Finally, the development of The Reserve at Woodlands, as proposed under the terms of the Development Agreement and shown on the conceptual site plan attached to the

Development Agreement as Exhibit 2 will provide a permanent 300 foot wide vegetative buffer between The Villages MPD, an adjacent urban use, and the rural area.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

The Initial Infiltration Facility and ultimate regional stormwater facility will not provide any residential housing. However, approximately 77 homes will ultimately be associated with a rural clustered subdivision contemplated by the Development Agreement for The Reserve at Woodlands. Such Development Agreement requires a separate rural clustered subdivision application and SEPA review prior to subdivision approval.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

No housing exists on The Reserve at Woodlands property; therefore, no housing will be eliminated.

- c. Proposed measures to reduce or control housing impacts, if any:**

Per the terms of the Development Agreement, The Reserve at Woodlands site will eventually be developed as a rural clustered subdivision. Per KCC 21A.06.196, clustering allows for the development of a subdivision at the existing density with reduced sizes of individual lots and the creation/retention of natural open space.

By developing the site as a rural clustered subdivision instead of a traditional subdivision, large tracts of open space will be retained, which will reduce housing impacts. It is anticipated that over 115 acres of otherwise developable land will be retained as open space within The Reserve at Woodlands rural clustered subdivision.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

The only structure related to the Initial Infiltration Facility and ultimately the regional stormwater facility is an energy dissipating block located inside of such facility, which will not exceed the height of the surrounding ground elevation.

Homes have not been designed for the future rural clustered subdivision on The Reserve at Woodlands site at this time. The future homes will be designed in accordance with Chapter 21A.12 of the King County Code and will not exceed the building height limit of 40' within the RA-5 and RA-10 Land Use Zones.

Exterior building materials have not been selected yet; however, it is anticipated that these materials will be consistent with northwestern style architecture.

- b. What views in the immediate vicinity would be altered or obstructed?**

None.

- c. Proposed measures to reduce or control aesthetic impacts, if any:**

- Existing vegetation will be retained on individual lots until home construction to allow for the thoughtful placement of homes on lots and the preservation of existing vegetation where appropriate.
- Disturbed areas will be landscaped according to applicable standards.
- Stormwater facilities will be graded for a more natural look as opposed to an engineered appearance.

To further control aesthetic impacts, a 300-foot wide vegetative buffer is proposed along the eastern boundary of The Reserve at Woodlands under the terms of the Development Agreement. The Development Agreement also requires that the open water portion of the regional stormwater facility will be required to resemble a natural feature with plantings to discourage human intrusion and that the landscaping within the tract for the regional stormwater facility comply with the Open Woodland standards of the 2009 King County Surface Water Design Manual's Guidelines for Naturalistic Plantings.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

When complete, the rural clustered subdivision will generate the light and glare typically associated with residential development. Such impacts will be reviewed under a separate project permit application and SEPA review.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

No.

- c. What existing off-site sources of light or glare may affect your proposal?**

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:**

None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?**

There are several community parks in the vicinity of The Reserve at Woodlands including the Eagle Creek Community Park, Lake Sawyer Regional Park (undeveloped) and Ginder Creek Park (undeveloped). Flaming Geyser Park is also located in the region to the south of the subject site. In addition, the adjacent Villages MPD will provide numerous recreational opportunities.

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

No authorized recreational uses will be displaced.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

Recreational activities will be enhanced within The Reserve at Woodlands site. Currently, there is an undeveloped 100' trail easement benefitting the County running the length of the eastern boundary of The Reserve at Woodlands site. Under the Development Agreement, this trail easement will be developed with a pedestrian and equestrian regional trail, with the southernmost portion of the trail being routed to 218th Avenue S.E. Moreover, per the terms of the Development Agreement, the trail corridor is anticipated to be 36 feet wide consisting of a separated multi-use path trail, with a paved hard-surface trail for shared uses and a gravel, soft-surface trail for equestrian use. The paved trail is anticipated to be 12 feet wide within the 36 foot wide trail corridor; however, the County may elect to reduce the trail width through sensitive areas. This will likely be one of the first legs of this Regional Trail which will ultimately connect Flaming Geyser Park to the Soos Creek Trail located westerly of the City of Covington. In addition, other trails may be located throughout the open space separating the clusters of home sites, and around the regional stormwater facility, providing walking, jogging, and nature observation activities.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

None known. The Villages MPD property immediately adjacent to the east of The Reserve at Woodlands site was analyzed through the EIS process and no significant historic or cultural resources on the MPD property were found. Reference pages 3-70 and 3-71 of the FEIS.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

None known.

- c. Proposed measures to reduce or control impacts, if any:**

The Grading Permit and the projects contemplated by the Development Agreement will comply with all applicable local, state and federal laws.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

The Reserve at Woodlands site is currently accessed from 218th Avenue SE via gravel logging road(s) and a portion of the site from SE Auburn Black Diamond Road. No roadway improvements or new access points are proposed with the grading permit for the Initial Infiltration Facility. The Development Agreement only allows emergency vehicle access to the proposed subdivision from 218th Avenue SE. This will allow access and egress of emergency service vehicles such as fire, police and medical in the event the main entrance to the development cannot provide such access. All other access will be provided via The Villages MPD roadway system. This access will be limited to one location to reduce conflicts with the King County regional trail.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

Metro Transit Routes 143 and 907 run along SR 169 to Seattle and Enumclaw and there is a bus stop for these routes at 3rd Avenue and Lawson Street, which is approximately 2 miles from the Reserve at Woodlands site.

- c. How many parking spaces would the completed project have? How many would the project eliminate?**

No parking spaces will be necessary as part of the Initial Infiltration Facility. Parking spaces will be provided for the rural clustered subdivision and the ultimate regional stormwater facility; however, the approximate number of parking spaces has not been determined at this time. These proposed projects will not eliminate any parking spaces.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

The Initial Infiltration Facility as well as the ultimate regional stormwater facility will not require any new roadways. The future rural clustered subdivision will require roadways to serve the proposed lots. The Development Agreement requires that roadways within the rural clustered subdivision will be privately owned and maintained.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

It is estimated that 77 single-family dwelling units in the rural clustered subdivision would generate approximately 740 daily vehicular trips and 78 PM peak hour trips. Peak traffic volumes would occur on weekdays during a one-hour period between 4:00 p.m. and 6:00 p.m. Traffic impacts of the rural clustered subdivision will be analyzed as part of environmental review for plat application for the subdivision.

- g. Proposed measures to reduce or control transportation impacts, if any:**

The Development Agreement limits access to the future Reserve at Woodlands' rural clustered subdivision to one access point from The Villages MPD in the City of Black Diamond in an effort to reduce potential conflicts between the regional trail users and vehicles at the access point. Further, the Development Agreement only allows emergency vehicle access to the site from 218th Avenue SE.

Payment of the County's Mitigation Payment System (MPS) fee will reduce or control project-generated impacts. Additional measures to reduce or control transportation impacts will be considered during environmental review of for the plat application for the rural clustered subdivision.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

The Initial Infiltration Facility will not generate the need for general public services. The future rural clustered subdivision will marginally increase the need for fire protection, police protection, health care services, schools and other such public services. It is anticipated that long-term maintenance of the ultimate regional stormwater facility will be performed by the City of Black Diamond.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The Development Agreement proposes several measures to reduce impacts on public services.

First, roads within the rural clustered subdivision shall be private and, therefore, maintained by the homeowners' association instead of King County Roads Division in order to reduce the impact on, and cost to, County services.

Second, the regional stormwater facility, including the Initial Infiltration Facility, will be initially owned and maintained by the proponent of the rural clustered subdivision. Over the long term, The Villages MPD Development Agreement (King County Recording No. 20120130000655) and MPD Conditions of Approval (Black Diamond Ord. No. 10-946) contemplate ownership and maintenance of the facility by the City of Black Diamond. The Development Agreement requires an interlocal agreement between King County and the City of Black Diamond to address issues related to design, oversight, construction and maintenance of storm water controls and conveyance from the City to the facility. The Development Agreement also requires an agreement between King County and Black Diamond or between King County and BD Village Partners, LP, related to the ownership and maintenance of the regional stormwater facility. Under this proposal, the County avoids bearing the cost of maintaining the regional stormwater facility thereby reducing the impact on public services.

Third, the regional stormwater facility is designed to accept floodwater from Horseshoe Lake thereby reducing the costs associated with emergency pumping needed to protect Horseshoe Lake property owners.

16. Utilities

a. Indicate utilities currently available at the site:

There are currently no utilities on the site.


b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

The Initial Infiltration Facility will not require any utilities other than the pump and piping system that will be necessary to move the flood waters from Horseshoe Lake into the new regional stormwater facility. The future rural clustered subdivision on The Reserve at Woodlands will require that electricity, water, and telephone services be brought to and through the developed portions of the property. Utility providers are as follows:

Sanitary Sewer:	On-site septic (except as noted above)
Water:	Covington Water District
Electricity/Nat. Gas:	Puget Sound Energy
Telephone:	Qwest/Other
Cable Service:	Comcast/Other

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 
Colin Lund
Yarrow Bay Holdings LLC

Date Prepared: November 12, 2013

SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

WAC 197-11-960 (Part D)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

- 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

The Development Agreement addresses standards for future development of The Reserve at Woodlands site. The Development Agreement limits the number of lots and requires lot clustering as part of any subdivision. The Development Agreement also addresses standards for a regional stormwater facility. Finally, the Development Agreement addresses the development of a regional trail. Subsequent actions to implement the Development Agreement will be subject to environmental review that will address any effects of those actions on the environment.

- 2. How would the proposal be likely to affect plants, animals, fish, or marine life?**

See the response to Question 1 on this Supplemental Sheet. Subsequent actions to implement the Development Agreement will be subject to environmental review that will address any effects to plants, animals, fish, or marine life.

- 3. How would the proposal be likely to deplete energy or natural resources?**

See response to Question 1 on this Supplemental Sheet. Subsequent actions to implement the Development Agreement will be subject to environmental review that will address any effects to energy or natural resources

- 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, flood plains, or prime farmlands?**

See response to Question 1 on this Supplemental Sheet. Subsequent actions to implement the Development Agreement will be subject to environmental review that will address effects to environmentally sensitive areas. The Development Agreement includes provisions to set aside additional open space and provides an easement for a County owned and maintained regional trail. These provisions will enhance existing open space and trails in the vicinity of the project site.

- 5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

See response to Question 1 on this Supplemental Sheet. The Development Agreement is consistent with King County's Comprehensive Plan and its Shoreline Master Plan.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

See response to Question 1 on this Supplemental Sheet. Subsequent actions to implement the Development Agreement will be subject to environmental review that will address infrastructure needs, including transportation, public services, and utilities.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

See response to Question 1 on this Supplemental Sheet. The Development Agreement is consistent with local, state, and federal laws and requirements for the protection of the environment. Subsequent actions to implement the Development Agreement will be subject to environmental review that will address any effects to environment of those actions.



Wetland Resources, Inc.

Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance

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WETLANDS & WILDLIFE
Environmental Consulting

**RECONNAISSANCE REPORT FOR
WILDLIFE HABITAT ASSESSMENT
THE RESERVE AT WOODLANDS**

Prepared For:

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August 19, 2013

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INTRODUCTION AND BRIEF SITE DESCRIPTION

Wetlands & Wildlife, Inc. was retained as a sub-contractor to *Wetland Resources, Inc.* for the purpose of completing a Wildlife Habitat Assessment on the subject properties. The subject Wildlife Habitat Assessment was completed to determine if any wildlife habitat used by special status wildlife species exists on the site, which is regulated pursuant to the King County Critical Areas Ordinance. *Wetlands & Wildlife, Inc.* conducted the on-site Wildlife Habitat Assessment over a period of four days (October 11, 2011 through October 14, 2011).

The review area for this Wildlife Habitat Assessment encompasses two separate tax parcels. Both parcels are currently undeveloped and therefore do not currently have an assigned address. The subject properties are located within unincorporated King County and the King County tax parcel numbers follow: 212106-9001 and 212106-9044. Based on information obtained from the King County Department of Assessments, tax parcel 212106-9001 encompasses approximately 466.38 acres, while tax parcel 212106-9044 encompasses approximately 35.56 acres. Both properties are currently owned by BD Village Partners. Site access to tax parcel number 212106-9001 is gained from 218th Avenue SE, an existing public roadway, which bisects the property and is oriented in a north-south direction. Site access to tax parcel number 212106-9044 is gained from SE Auburn - Black Diamond Road, an existing public roadway located along the southern boundary of that parcel and along the northwestern boundary of tax parcel 212106-9001.

The property owners are currently in the conceptual design and planning phase of a potential future residential development on the subject properties. *Wetlands & Wildlife, Inc.* briefly reviewed the Conceptual Site Plan dated 04/23/13. This habitat assessment was conducted independent of a specific development proposal, and the intent was to examine the existing wildlife habitat provided by the current site characteristics. Therefore, the findings discussed in this report should remain applicable regardless of any specific development proposal.

STATEMENT OF QUALIFICATIONS TO COMPLETE THIS WILDLIFE HABITAT ASSESSMENT

The following provides a brief overview of my experience and credentials to conduct this Wildlife Habitat Assessment. I am the Founder, Owner, and Principal Wetland and Wildlife Ecologist of *Wetlands & Wildlife, Inc.* I attended the University of Montana where I graduated cum laude with a degree in Wildlife Biology. As of 2011, I have 10 years of direct experience as a professional Biologist/Ecologist in western Washington and 14 years of overall experience completing natural resource assessments among many different ecosystems across the western United States. I have worked as a professional Biologist/Ecologist for federal, state, and county environmental agencies, as well as several private environmental consulting firms with specialties in wildlife habitat, wetlands, streams, rivers, and lakes. In my 14 years of experience, I have specialized in review of proposed land use and building development permit applications as they pertain to Critical Areas (wetlands, rivers, streams, lakes, and habitats of protected fish and wildlife species). I gained much of that experience while employed as a Senior Ecologist for King County DDES and a Regulatory Biologist for Snohomish County PDS.

I received certifications from the Washington Department of Fish and Wildlife for terrestrial wildlife habitat assessments and wildlife surveys of special status wildlife species in Washington. I have 14 years of direct experience conducting surveys of special status wildlife species (protected per federal and state laws) in the western United States. I have been selected as the technical expert by local jurisdictions to provide 3rd-party reviews of the recently adopted (2010) FEMA Floodplain Habitat Assessments and applicable Critical Areas Regulations. Over the past 14 years, I have conducted literally over 1,000 different biological / ecological assessments on properties with

many habitat types and zoning designations, from small, urban properties (0.25 acres) to large, rural properties (up to 1,000 acres in size).

METHODOLOGY OF WILDLIFE HABITAT ASSESSMENT

The purpose of this Wildlife Habitat Assessment was to identify any Wildlife Habitat Conservation Areas or Wildlife Habitat Networks which are regulated pursuant to sections 21A.24.382 through 21A.24.388 of the King County Code (KCC). In addition, the on-site habitat was evaluated to determine if the site provides habitat for any Species of Local Importance listed in Chapter 4 of the current King County Comprehensive Plan. Please note that the purpose of this assessment was related to potential wildlife habitat and was not intended to represent a wildlife survey for particular species.

Wetlands & Wildlife, Inc. conducted daily site visits to complete this Wildlife Habitat Assessment from October 11, 2011 through October 14, 2011. *Wetlands & Wildlife, Inc.* conducted an initial site visit to the properties on October 11th to gain familiarity with the site and determine focus areas for the Wildlife Habitat Assessment. Based on information gained from site research and the initial visit, *Wetlands & Wildlife, Inc.* conducted on-site habitat assessments and evaluations among many different portions of the site from 7:00 a.m. until approximately 2:00 p.m. on October 12th, 13th, and 14th. We evaluated specific habitats and locations to determine if protected wildlife habitat such as Wildlife Habitat Conservation Areas (WHCA's) exist on-site. *Wetlands & Wildlife, Inc.* traversed the majority of the property in locations with the highest probability to contain protected wildlife habitat to examine the evidence of wildlife use. *Wetlands & Wildlife, Inc.* also conducted point counts for wildlife habitat use observations in specific locations, which had the highest potential to contain regulated habitat areas. The point counts for this assessment were intended to provide information regarding overall wildlife species diversity on-site. Both audible and visual detections were recorded, and species detections were only recorded once to document use of the site (not recorded at each point count because this is not intended as a wildlife survey). *Wetlands & Wildlife, Inc.* also examined the on-site habitat for evidence of mammal use including scat, tracks, trails, bedding areas, scratch marks, tree rubbings, bone piles, and hair deposits.

Wetlands & Wildlife, Inc. reviewed the online version of the Priority Habitat and Species (PHS) maps provided by the Washington Department of Fish and Wildlife (WDFW), researched King County's internal GIS system by contacting Senior Ecologists at King County's Department of Development and Environmental Services (DDES), and researched public information available on King County's iMAP system. Aerial photographs obtained from *Wetland Resources, Inc.* were used for habitat reviews and interpretations while on-site.

RESULTS AND FINDINGS OF WILDLIFE HABITAT ASSESSMENT

On-site Wetlands and Aquatic Areas:

In addition to smaller wetlands, a large wetland exists on parcel number 212106-9001, located adjacent to (east of) 218th Avenue SE in the north-central portion of the property. The wetland is a headwater wetland, and the hydrology from this large ponded wetland flows west under 218th Avenue SE via a culvert. A defined stream channel exists west of the culvert outlet and the stream transports hydrology among a steep ravine to the west for approximately 800-900 feet before connecting with another stream (identified on stream maps as Crisp Creek). Crisp Creek is located among the western portion of the property (west of 218th Avenue SE) and flows onto the parcel number 212106-9044 from the north. Crisp Creek flows from north to south, travels under SE Auburn-Black Diamond Road, and continues south among a steep ravine until flowing off-site to the south. Crisp Creek and the unnamed stream channel that transports hydrology from the large wetland are located at the base of a steep ravine. Based on review

of StreamNet and SalmonScape maps, neither Crisp Creek nor the unnamed stream provide habitat for anadromous fish species. The streams, associated steep ravines, and protective buffer areas are well vegetated with mature trees. These areas are located within Habitat Type A described below.

Description of On-site Habitat Types and On-site Priority Habitat Areas:

Please see Figure 1: Approximate Habitat Types Map for the approximate locations of different habitat types on the subject site. Based on this assessment, three general habitat types exist on the subject properties. Those habitat types are labeled A, B, and C on the associated map and are described below:

Habitat Type A:

As depicted on Figure 1, Habitat Type A encompasses the extreme south-eastern portion of the property, the large wetland located east of 218th Avenue SE in the north-central portion of the site, and the stream corridors located west of 218th Avenue SE. Habitat Type A is dominated by mature trees such as Douglas fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), and big-leaf maple (*Acer macrophyllum*), with black cottonwood (*Populus balsamifera*) and red alder (*Alnus rubra*) also being present among the wetland and near the stream Ordinary High Water Marks (OHWM). The shrub layer and understory among Habitat Type A is more open than other habitat types on the site, due to the mature trees. Vine maple (*Acer circinatum*) is the most common shrub in this habitat type, and sword fern (*Polystichum munitum*) is the most common herbaceous species. The large wetland east of 218th Avenue SE (adjacent to the road and extending east) contains a mix of vegetative classes. The majority of the wetland does not contain live trees, but contains many large standing snags. This may be due to a change in hydrologic regime which created wetter conditions than when the trees originally thrived in the wetland. Although the interior portions of the large wetland lack a dominance of living trees, the standing snags and large woody debris among the wetland provide excellent habitat for species such as woodpeckers that rely on snags for foraging opportunities. The margin / boundary of the wetland and surrounding protective buffer areas contain mature trees.

Habitat Type B:

As depicted on Figure 1, Habitat Type B encompasses the area east of 218th Avenue SE in the north-central portion of the site (north of the large wetland) and those areas immediately west of 218th Avenue SE which are not included in Habitat Type A. Habitat Type B is dominated by moderately dense immature trees (primarily Douglas fir), with shrubs such as Scot's broom (*Cytisus scoparius*) and salal (*Gaultheria shallon*) present. This habitat type also includes Himalayan blackberry (*Rubus armeniacus*), bracken fern (*Pteridium aquilinum*), and more open patches where graminoids are dominant. The primary difference between this Habitat Type and Habitat Type C is the density of trees. Habitat Type B provides more open habitat with increased interspersions between vegetation classes, while Habitat Type C is dominated by very dense conifer trees as described below.

Habitat Type C:

As depicted on Figure 1, Habitat Type C encompasses the vast majority of the subject properties. Habitat Type C is dominated by a very dense, even-aged coniferous forest. The forest among Habitat Type C appears to have been logged or cleared approximately 15-20 years ago, based on the age class of the trees present. Due to the dense forest and lack of available sunlight, many vegetative species are not able to thrive in the shrub layer or understory. The majority of the site is dominated by non-wetland areas and contains dense conifer trees (primarily Douglas fir), with salal, Oregon grape (*Berberis nervosa*), sword fern, bracken fern, and trailing blackberry (*Rubus ursinus*) present in the understory. However, a few scattered wetland areas exist in this habitat type which are dominated by hardhack (*Spiraea douglasii*) or slough sedge (*Carex obnupta*).

On-site Priority Habitat Areas:

King County's Comprehensive Plan designates the Crisp Creek riparian corridor located among the western portion of this assessment area as a Wildlife Habitat Network. Per KCC 21A.24.386.B.2, to the maximum extent practical, the network should maintain a width of 300 feet. The network width shall not be less than 150 feet at any point.

The WDFW maintains a list of Priority Habitat types, which are considered to be priorities for conservation and management. Priority habitats are habitat types or elements with unique or significant value to a diverse assemblage of species. The subject properties contain the following Priority Habitats:

1. Biodiversity Areas and Corridors (due to the Wildlife Habitat Network mapped by King County)
2. Riparian Habitat
3. Freshwater Wetlands
4. Instream Habitat
5. Snags and Logs

Based on review of the Conceptual Site Plan dated 04/23/13, all of the priority habitat areas mentioned above are proposed to be protected and left in permanent Open Space.

The online PHS maps provided by WDFW depict two specific Priority Habitats located among the subject properties. The large wetland east of 218th Avenue SE is mapped and identified as a priority aquatic habitat. The wetland and a surrounding wetland buffer will remain undisturbed as required per the King County Critical Areas Ordinance. The other priority habitat identified on the online PHS map for this vicinity is a Regular Concentration Area for elk. Regular Concentration Areas, as defined by the WDFW PHS information, are those "areas that are commonly or traditionally used by a group of animals on a seasonal or year-round basis". The subject properties are located near the southwestern extent of the mapped Regular Concentration Area for elk in this vicinity. The polygon for the subject Regular Concentration Area is irregular in shape but extends approximately 30 miles to the northeast and 15 miles to the east of the subject properties.

Discussion Regarding Wildlife Species Protection:

The King County Critical Areas Ordinance regulates Wildlife Habitat Conservation Areas (WHCA's) pursuant to KCC 21A.24.382. Per 21A.06.1423, a Wildlife Habitat Conservation Area is defined as "an area for a species whose habitat the King County Comprehensive Plan requires the county to protect that includes an active breeding site and the area surrounding the breeding site that is necessary to protect breeding activity."

The following list includes species whose WHCA's are distinctly protected pursuant to KCC 21A.24.382:

1. Bald eagle
2. Great blue heron
3. Marbled murrelet
4. Northern goshawk
5. Osprey
6. Peregrine falcon
7. Spotted owl
8. Townsend's big-eared bat
9. Vaux's swift
10. Red-tailed hawk

In addition to the species listed in the King County Critical Areas Ordinance shown above, the King County Comprehensive Plan provides a list of Wildlife Species of Local Importance. This list includes salmonids, native freshwater mussels, shellfish, marine fish, birds, mammals, amphibians, and reptiles. The King County Comprehensive Plan states that King County should protect the species in that list, or their habitat, as appropriate to support those species.

Wildlife Species Detections or Evidence of Use among the On-Site Habitat:

Wetlands & Wildlife, Inc. detected a total of 26 different bird species on-site, evidence of use by 8 mammal species, and a detection of 1 amphibian. The number of species detected in October (outside of the breeding and nesting season) indicates that the site contains valuable habitat for a wide variety of species. Similar to most habitat types in western Washington, seasonal variation of wildlife use among this site is expected. In particular, *Wetlands & Wildlife, Inc.* predicts that the site provides habitat for additional passerine birds during the breeding and nesting seasons which migrate out of the area during fall and winter months. The habitat among the large wetland and surrounding buffer areas provide the highest quality bird habitat on-site, as evidenced by a high number of different species detections among and near the wetland. The vegetation present in and near the wetland provides a diverse interspersed of habitats, thus increasing the amount of "edge" habitat which many species prefer over other habitats. No habitats of primary association for species protected by King County's Critical Areas Ordinance were located on-site. Two of the bird species detected (great blue heron and pileated woodpecker) are listed on the Washington Department of Fish and Wildlife's Species of Concern List. Great blue herons are listed as a state monitored species, while the pileated woodpecker is a state sensitive species. Great blue herons nest in colonies, and no nesting colonies are located on the subject properties. Therefore, no specific habitat protection or regulations are required for the great blue heron on this site. Pileated woodpeckers are primary cavity nesters, meaning they excavate a hole from an early-decay stage snag for their nest location. Two former pileated woodpecker nests were detected on the site, both of which are located among the large wetland area in standing snags. However, pileated woodpeckers typically don't portray strong nest site fidelity and most often excavate a new nest hole each breeding season. Therefore, the nest locations detected are not likely to be used in future years by pileated woodpeckers.

The only species listed by King County Comprehensive Plan's Species of Local Importance that were detected on the subject properties include a hairy woodpecker, elk, and Douglas squirrel. While no visual or audible detections of elk occurred during the on-site habitat assessment, the site does portray evidence of use by elk as described below.

Discussion Regarding Use of On-Site Habitat by Elk:

As discussed above, the properties are mapped as being within a Regular Concentration Area for Roosevelt elk (*Cervus elaphus roosevelti*). This habitat assessment confirmed that Roosevelt elk do use the habitat on the site. No audible or visual detections of elk occurred while conducting this assessment. However, *Wetlands & Wildlife, Inc.* found evidence of elk use in a variety of forms including the following: 1) bedding areas; 2) droppings/scat; 3) tracks; 4) a network of trails; 5) tree rubbing sites; and 6) hair on fences and trees. Based on observations over the assessment period, it appears that the elk regularly use the entire property west of 218th Avenue SE (including the stream corridors), the large wetland area east of 218th Avenue SE, and the northern portion of the site. A network of trails and matted vegetation (bedding areas) were located among areas shown as Habitat Type B and along the ridge tops associated with the stream corridors. This network of concentrated trails indicates regular use and movement of elk throughout those portions of the site. While there is also recent sign of elk use among other portions of the site, the western and northern portions of the site contain higher quality forage habitat for the elk than the dense forest. Elk are primarily grazers during the spring and summer months, meaning graminoids compose the majority of their diet. When graminoid growth and forage quality diminishes in the late fall and winter months, elk typically forage on shrubs or trees as needed until the following spring when graminoid growth returns. Therefore, *Wetlands & Wildlife, Inc.* theorizes that the elk likely use the dense forest areas during the late fall and winter, but the majority of current use appears to be focused in the northern and western portions of the property.

Discussion Regarding Recommended Wildlife Survey During Breeding Season:

The vast majority of the property does not contain suitable habitat for WHCA's used by species listed in the King County Critical Areas Ordinance. However, a few dominant trees (6 total) are located among the site which exhibit strong characteristics for potential red-tailed hawk and/or bald eagle nest trees. These specific trees are dominant trees among their surrounding environment and contain prominent crooks which are typical of selected nest tree characteristics. A mature black cottonwood tree and a mature big-leaf maple tree are located along the southern

boundary of the large wetland, and display strong potential nest site characteristics. The other 4 trees are all Douglas fir trees and are located at the top of the steep slopes in the southern portion of the property. These trees are visible from the terminal end of the spur roads that travel south from the main road/trail. These Douglas fir trees are potential nest trees because of their location at the top of the steep slope (making them prominent among their surroundings), but also because of the direct flight path from those trees south to the Green River. Although all 6 of these trees display strong potential nest site characteristics for red-tailed hawks and bald eagles, the surrounding trees and leaves on the site make it difficult to determine if any of the trees have been used for nesting in the recent past. Therefore, *Wetlands & Wildlife, Inc.* recommends having a wildlife survey conducted in mid-March to determine if any of those trees contain an active breeding site which would trigger additional Wildlife Habitat Conservation Area regulations set forth in KCC 21A.24.382.

SUMMARY AND RECOMMENDATIONS RELATED TO THIS WILDLIFE HABITAT ASSESSMENT

Wetlands & Wildlife, Inc. found no indication of active breeding sites or evidence of breeding / nesting use by any species listed in section 21A.24.382 of the King County Critical Areas Ordinance. Similarly, no active breeding sites of any federal or state special status wildlife species were located among the properties during this wildlife habitat assessment.

The subject properties do provide habitat for a wide variety of wildlife species, primarily due to the overall size of the properties, the landscape context, the interspersed habitat types, and presence of multiple habitat requirements (thermal cover, hiding cover, foraging opportunities, and water) in relatively close proximity. *Wetlands & Wildlife, Inc.* recommends completing a wildlife survey of the six trees described previously in the report. The most appropriate time to evaluate specific trees for active breeding sites (nests) is mid-March to early April, as bird species have typically selected a nest site for that breeding season by mid-March and would be present among the vicinity during a wildlife survey in March.

The on-site habitat provides evidence of use by elk. Similar to many large mammals, elk typically require large tracts of contiguous habitat corridors to thrive and often display aversion to areas, which are highly used by humans. Therefore, *Wetlands & Wildlife, Inc.* recommends permanently protecting large corridors of contiguous habitat for elk movement corridors in an effort to minimize the magnitude of the human – wildlife interaction. Based on review of the Conceptual Site Plan dated 04/23/13, the property owner intends to preserve the portions of the site which are more often used by elk through placement of many areas in permanent Open Space. Permanently protected Open Space tracts would aid in maintaining valuable habitat corridors for the elk and other large mammals that currently utilize the on-site habitats.

LIMITATIONS AND USE OF THIS REPORT

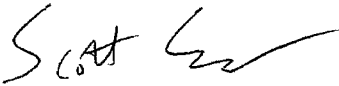
This report associated with the Wildlife Habitat Assessment is supplied to *Wetland Resources, Inc.* and is intended to aid in the conceptual planning and designing phases for a potential future development plan. Please note that the purpose and focus of this assessment was to identify documented or potential wildlife habitat conservation areas and wildlife habitat networks, with an emphasis on vegetative conditions and habitat connectivity provided by the properties. This report and associated field work are not intended to represent a wildlife survey for any particular species or individuals of a species. The report and field work are intended as an assessment of the vegetative conditions and landscape context among the subject properties which may provide habitat conditions for special status species. As discussed previously in the report, seasonal variation of wildlife use among this site is expected. Therefore, absence of a species or lack of a detection in October should not be construed to suggest that a given species doesn't utilize the on-site habitats during a different portion of the year.

Wetlands & Wildlife, Inc. did not evaluate the site for the presence, extent, classification, or regulatory implications of any other Critical Areas types (e.g. wetlands, aquatic areas, or geologic hazard areas) which are also regulated by the King County Critical Areas Ordinance.

The work for this report has conformed to the standard of care employed by professional ecologists in the Puget Sound region. While *Wetlands & Wildlife, Inc.* upheld professional industry standards when completing this review, the information included in this report does not guarantee approval by any federal, state, and/or local permitting agencies. Therefore, *Wetlands & Wildlife, Inc.* does not recommend commencing any activity which requires a permit on the properties until all appropriate permits have been obtained.

If any questions arise regarding this assessment or report, please contact me directly at (425) 337-6450.

Regards,

A handwritten signature in black ink, appearing to read "Scott Spooner", with a stylized flourish at the end.

Scott Spooner
Owner / Principal Wetland & Wildlife Ecologist
Wetlands & Wildlife, Inc.

REFERENCES AND LITERATURE CITED

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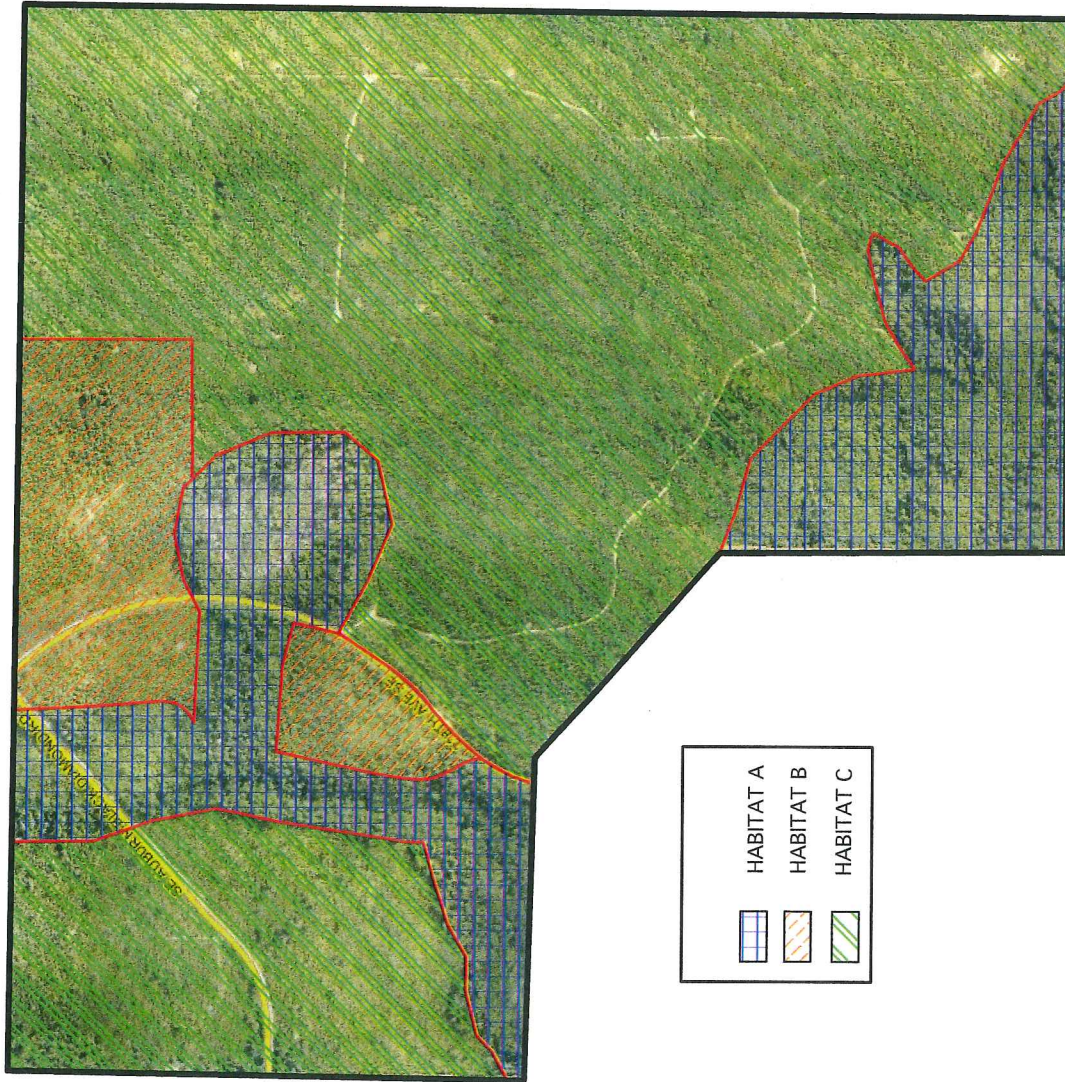
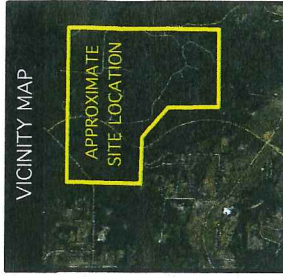
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APPROXIMATE HABITAT TYPES MAP
 THE RESERVE AT WOODLANDS
 Portion of Section 13 and 14, Twp 21N, Rge 6E



- HABITAT A
- HABITAT B
- HABITAT C



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APPROXIMATE HABITAT TYPES MAP
 THE RESERVE AT WOODLANDS
 BLACK DIAMOND, WA

BD Village Partners, LP
 ATTN: Colin Lund
 P.O. Box 690
 Black Diamond, WA 98010

Sheet 1/1
 WRI Job #11112
 Drawn by: ZW
 08.19.13

Section I: Buildings

Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Emissions Per Unit or Per Thousand Square Feet (MTCO2e)			Lifespan Emissions (MTCO2e)
			Embodied	Energy	Transportation	
Single-Family Home.....	77		98	672	792	120262
Multi-Family Unit in Large Building	0		33	357	766	0
Multi-Family Unit in Small Building	0		54	681	766	0
Mobile Home.....	0		41	475	709	0
Education		0.0	39	646	361	0
Food Sales		0.0	39	1,541	282	0
Food Service		0.0	39	1,994	561	0
Health Care Inpatient		0.0	39	1,938	582	0
Health Care Outpatient		0.0	39	737	571	0
Lodging		0.0	39	777	117	0
Retail (Other Than Mall).....		0.0	39	577	247	0
Office		0.0	39	723	588	0
Public Assembly		0.0	39	733	150	0
Public Order and Safety		0.0	39	899	374	0
Religious Worship		0.0	39	339	129	0
Service		0.0	39	599	266	0
Warehouse and Storage		0.0	39	352	181	0
Other		0.0	39	1,278	257	0
Vacant (Regional Stormwater Facility)...		1,306.8	39	0	0	50594

Section II: Pavement.....

Pavement.....	576.00					28800
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Total Project Emissions:

199655

Regional Stormwater Facility (RSF): 1,306.80 (30 acres; 43,560 square feet in 1 acre; 43,560 x 30 = 1,306,800 square feet/1,000)

Note: The RSF was included in the GHG emissions calculation above to capture any potential embodied emissions during construction of the Facility.

Pavement: 576 (576,000 square feet/1,000)